Spontaneous regression of congenital epulis of the newborn

H R JENKINS AND C M HILL*

Departments of Child Health and *Oral Surgery, University Hospital of Wales

SUMMARY An infant with congenital gingival epulis which spontaneously regressed over the first year of life is reported. A policy of conservative management should be adopted in this condition unless there are feeding problems in the newborn period or reasons to doubt the diagnosis.

Congenital epulis of the newborn is a rare, benign tumour of the gingiva first described in 1871.1 The aetiology and histological origin of the tumour are unknown and there are still doubts as to the natural history of the condition. The optimal management of congenital epulis is unclear and some authors have recommended simple excision in the neonatal period.2 This report concerns an infant who pre-
resented with a congenital epulis arising from the anterior maxillary region that was managed conservatively. Subsequently there was spontaneous regression of the lesion during the first year of life.

Case report

A girl, weighing 3900 g, born at term by spontaneous vertex delivery after an uneventful pregnancy was noted to have a pedunculated, fleshy mass measuring some 1.5 cm in diameter arising from the right anterior alveolar margin (fig 1). There was no family history of congenital abnormality and the child was otherwise normal. Despite the size and prominence of the mass the infant fed satisfactorily from the breast and subsequently thrived.

Surgical excision was deferred and the child was reviewed regularly on an outpatient basis. There was spontaneous regression of the epulis to a size of 3–4 mm by 12 months of age (fig 2). The primary dentition erupted uneventfully.

Discussion

Approximately 120 cases of congenital epulis of the newborn infant have been described in the literature since the first report in the 19th century, and several important features have emerged. In a review of the 113 cases described between 1871 and 1971 Fuhr and Krogh noted a striking and unexplained preponderance of females, with the maxilla affected two to three times as often as the mandible. Rarely multiple lesions have been described with associated abnormalities of the nasal bridge and septum.

The clinical diagnosis of congenital epulis is almost obligatory when a solitary tumour of the gingiva is present at birth. The diagnosis can only be confirmed by histological examination but this would involve surgical intervention, with the attendant risks of haemorrhage in a small neonate, and negate the conservative approach that some authors have advocated. The remote possibility of Epstein’s pearls (gingival cysts) or of an eruption cyst arising prematurely would not be consistent with the clinical characteristics of the lesion which is pink, rubbery firm, and present at birth. The other possible diagnosis is that of an isolated premature nodule of fibromatoses gingivae but the subsequent clinical history in our case was not consistent with this.

There are no reports of recurrence of congenital epulis after excision, or of metastasis, and the histological appearance of the lesion is usually that of a granular cell myoblastoma without pseudo-epitheliomatous hyperplasia. The aetiology of the condition is unknown, and the natural history and optimal management of the lesion are not well defined. Most cases of congenital epulis are treated surgically and some texts recommend early excision of the lesions in the newborn period.

Despite the fact that this lesion is probably hamartomatous and neither inflammatory nor neoplastic, excision of a sessile epulis may expose a wide base which can bleed persistently and in early infancy precautions must be taken to limit blood loss to an absolute minimum. Parenteral vitamin K, atraumatic intubation, the use of local anaesthetic with vasoconstrictor, excision without margins, and bipolar coagulation should all be employed if surgical excision is indicated. Welbury, however, has advocated an expectant, non-operative approach as the management of choice and, having adopted this policy in our case, there was consider-
Spontaneous regression of congenital epulis of the newborn

able spontaneous regression of the lesion by the age of one year. Alveolar development and the early dentition appear to have been unaffected.

It may well be that congenital epulis of the newborn is not as rare as has been previously believed and perhaps, with a greater awareness and reporting of the condition, its natural history will become more evident. In the meantime, contrary to the opinions of some authors, we would strongly advocate a conservative approach to the lesion unless there are feeding problems or diagnostic doubt that necessitate surgical intervention. If there are obvious and troublesome feeding difficulties in the newborn period simple excision with the precautions outlined above is the treatment of choice.

We wish to acknowledge the help of the department of medical photography at the University College of Wales Dental School for producing the illustrations and also Mrs Carole Demontoux for typing the manuscript.

References


Correspondence to Mr CM Hill, Department of Oral Surgery, Cardiff Dental Hospital, Heath Park, Cardiff CF4 4XY.

Accepted 11 August 1988